

# **NEC Four-Way Fault Tolerant Server**

Full fault tolerance for your enterprise applications.



- 99.999% server uptime
- Runs large data center applications
- True, high availability enables server consolidation
- · Ideal for server virtualization

# A better approach to fault tolerance in an enterprise class server.

Achieving full fault tolerance for large, enterprise class servers has proven to be an expensive and frustrating operation. Software clustering has been the best solution to date, but it is extremely costly to set up and maintain, and still results in hours of downtime each year. But now, with NEC's new four-way High Availability Fault Tolerant server, you can put multiple data center applications on a single, powerful server—a server with two redundant sets of 4 Intel® Xeon® MP 2.8 GHz CPUs—for full fault tolerance and maximum reliability.

#### THE HIGHEST LEVEL OF AVAILABILITY

NEC Solutions America introduces an innovative approach to fault tolerance for large, enterprise class applications: the Express5800/340Hb-R Four-Way Fault Tolerant server. With four logical CPUs, this enterprise class server has the horsepower required to consolidate multiple applications onto one server.

Designed with complete hardware redundancy, every component in this four-way High Availability Fault Tolerant server has an identical part, so there is no single point of failure. If a component does fail, it provides instantaneous failover to the redundant component, ensuring that there is never a loss of system state or data. Furthermore, the server's unique design employs hot-swappable modules, where if any component within the module fails, it can be replaced while the application continues to run at 100% on the redundant module.

The result is 99.999% uptime, the highest levels of availability in the industry. Most non-fault tolerant servers suffer an average of 44 hours of downtime each year, this four-way Fault Tolerant server averages less than 5 minutes of unplanned downtime a year.

Every IT department would like to reduce the number of servers in their architecture, and with the powerful performance of the NEC Express5800/340Hb-R, you can safely consolidate your applications onto one server.



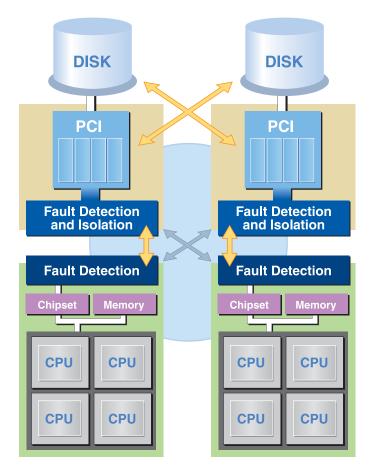
#### POWERFUL ENOUGH FOR DATA CENTER APPLICATIONS

This four-way server has enough performance to run large, data center applications in a fully fault tolerant environment. Applications such as enterprise messaging, resource planning, customer relationship management, supply chain management and other mission critical applications can now safely be consolidated to a single server.

## A MUST FOR MISSION CRITICAL APPLICATIONS

Server downtime can wreak havoc on an organization, especially those running mission critical applications. Because the NEC Four-Way Fault Tolerant server has the capability to run mission critical applications with full fault tolerance, it is the ideal solution for many organizations.

**Financial.** In banks, credit card sales authorization companies, or brokerage operations, downtime can cost millions of dollars per hour.



With 4 CPUs per blade, the Express5800/340Hb-R allows for no single point of failure, zero switchover time, and single software image.

**Health Care.** The need for immediate and reliable access to patient records, critical data, and institutional information makes this solution a must for health care organizations.

**Retail.** Downtime in the retail environment often results in lost sales. With this full fault tolerant server, sales and inventory information are always readily available.

**Pharmaceutical.** Development laboratories must keep track of new and existing tests that often span over weeks. Any downtime in the process results in them having to throw away millions of dollars worth of product and wasted time. Thus, a full fault tolerant solution keeps entire batches of modeling data from ever being lost.

**Government.** Huge databases of criminal records, driving records, disasters, and other types of information are instantly available with the NEC Four-Way Fault Tolerant server.

**Utilities.** A single server going down can cause a cascading effect and create an energy disaster much like what caused the largest blackout in the history of North America in August 2003. With this NEC solution, you have full fault tolerance and complete hardware redundancy to prevent this from happening.

## PERFECT FOR HOSTING MICROSOFT® VIRTUAL SERVER

NEC's Four-Way High Availability Fault Tolerant server provides a true server virtualization solution, with both hardware and software—making this the ideal platform for hosting Microsoft Virtual Server 2005. With the ability to support Microsoft Virtual Server, and most Windows® applications. The high-performance configuration provides the computing power to support multiple operating systems and applications stacks in a fully fault tolerant environment—without sacrificing performance.

#### A GREAT RETURN ON YOUR INVESTMENT

The Express5800/340Hb-R High Availability Fault Tolerant server eliminates so many of the costs associated with running enterprise class applications.

"The high-availability segment will grow at a 13% compound annual growth rate, which is twice as fast as the total server market. The Windows segment of the high-availability market is growing at 39% from 9% of the total to an expected 28% by 2006"— IDC\*

Multiple servers are no longer required, substantially reducing hardware costs. The multiple software licenses required in clustering solutions are now reduced to just one. All this will lead to a dramatic reduction in your administrative time and cost. With NEC's Express5800/340Hb-R Four-Way Fault Tolerant server you will a see dramatic decrease in your costs for hardware, software and maintenance. And most importantly, mission critical applications are not impacted.

# **KEY FEATURES**

- Full fault tolerance for enterprise class applications
- Provides up to 99.999% application uptime
- Ideal for server virtualization and server consolidation
- Powerful performance for data center applications
- Saves on hardware, software and maintenance costs
- Microsoft Windows Server<sup>™</sup> 2003 Enterprise Edition
- Supports Microsoft Virtual Server 2005

# **Express5800/340Hb-R Four-Way Fault Tolerant Server Specifications**

## **How to Buy**

Contact your local NEC Solutions America representative, or call 888-632-8701 for more information.

#### CPU (/CRU)

- Frequency Xeon MP 2.8GHz, 8 Physical w/hyperthreading
- Cache 2MB

# **Chipset**

ServerWorks GC-HE

# **Memory (/CRU)**

- FSB SDRAM (400MHz)
- Minimum 2GB 12GB max logical
- Protection ECC SDRAM
- Slots 12 Slots (4 way interleave / processor module)

#### I/O Slots

- PCI 64(bit)/33MHz. & 2x 64(bit)/66Mhz.
- PCI Slots /Exp. 12 (2 occupied for video)

# HDD (CRU)

- Basic 18GB x 1 (2x physical)
- Maximum 311.1GB / 18.1GB+146.5GB x 2 (6 x physical)
- Interface SCSI-LVD Hot Swappable

#### LAN

Redundant Integrated 100BASE-TX & 1000BASE-T

# **Graphics**

• Redundant CT69000 (PCI Board) w/2MB VRAM

# **Peripherals**

• FDD - USB external FDD (1.44MB capacity)

#### **Devices**

ullet Redundant CD-ROM - 24x or better (IDE)

#### **External Interface**

- VGA
- USB x 2
- Serial x 2
- 100BASE x 2
- 1000BASE x 2

#### **Service Processors**

• x2 (1 integrated into each I/O blade)

# **Power Supply**

• Integrated into each blade

#### **Cabinet Size**

• Rack mount (10U)

# **Operating System**

Microsoft Windows Server 2003 Enterprise Edition

#### **Limited Warranty**

• Standard 1-year warranty





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